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RECEIVED

May 20, 1999

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Direct Dial Number

Magalie Roman Salas

Secretary

Federal Communications Commission

445 12th Street, S.W.

Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: KSI INC

Ex Parte Presentation

CC Docket No. 94-102

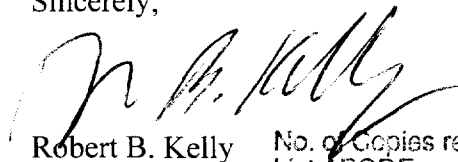
Dear Ms. Salas:

On Wednesday, May 19, 1999, Cynthia White, Charles Hinkle, John Maloney and Simon Swales of KSI INC. (KSI), and Robert B. Kelly and Kelly Quinn of Squire, Sanders & Dempsey, LLP, counsel to KSI met with Nancy Boocker, Ronald Netro, Marty Liebman, Won Kim, and Mindy Littell of the Wireless Bureau and Robert Bromery, Harry Wong and Nam Pham of the Office of Engineering and Technology. The meeting was held at KSI's Annadale office.

In that meeting, the parties discussed KSI's TeleSentinel Wireless Location System and KSI provided a live demonstration of TeleSentinel's AMPS and TDMA capabilities which satisfy the Commission's Phase II Automatic Location Identification (ALI) requirements. The presentation is summarized in the attached slides. Additionally, KSI urged the Commission to affirm its commitment to the provision of Phase II E911 location information by October 1, 2001 for all wireless callers. The materials attached hereto were also distributed and discussed during the presentation.

Pursuant to section 1.1206 of the Commission's rules, one original and two copies of this letter and attachments are being filed with the Office of the Secretary.

Sincerely,



Robert B. Kelly

No. of Copies rec'd 012
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Jacksonville . Kyiv . London . Madrid . Miami . Moscow . New York . Phoenix . Prague . Taipei*

Ms. Salas Magalie Roman Salas
Page 2

May 20, 1999

Cc: Thomas Sugrue, Chief, Wireless Bureau
Nancy Boocker, Acting Chief, Policy Division
Ronald F. Netro
Won Kim
Mindy Littell
Marty Liebman
Robert Bromery
Harry Wong
Nam Pham

Enclosures
Compact Disc filed with Original



TeleSentinel™

Wireless Location System

The Business of Location

May 1999

KSI Inc. • 7630 Little River Turnpike • Annandale, VA 22003
Tel: 703-941-5749 • Fax: 703-941-5786 • Web: www.TeleSentinel.com

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Meeting agenda

- **Demonstration**
- **KSI Past, Present and Future**
- **The TeleSentinel System**
- **Facts For the Record**
- **Common Needs**
- **Conclusion**

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Demonstration

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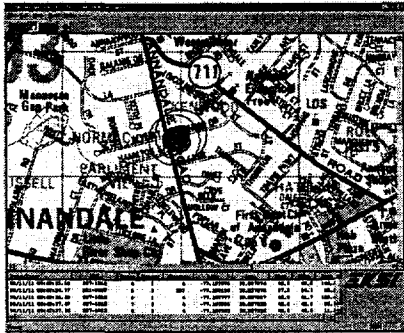
Results to Date

- Consistently Meet or Exceed FCC Location Requirements:
 - AMPS Data Indicate an RMS Accuracy of 61m
 - TDMA Data Indicate an RMS Accuracy of 57m
 - RMS of min 90% of md = 40m
 - 96% md < 125m

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Multi-Mode/Carrier



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KSI
Past, Present and Future

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Background

- 25+ years of experience in localization & tracking (L&T)
- Relevant Mgmt Experience, L&T & Telecom
- 1988: Granted AOA patent (#4,728,959)
- 1991: Deployed 2-site AMPS Prototype
- 1994/Now: New Patents Pending
- 1994/Now: Support for FCC E-911 Docket
- 1997 (Nov): Began Development of AMPS/TDMA TeleSentinel System
- 1998 (Sep): Deployed Four Site AMPS/TDMA TeleSentinel System

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Present and Future

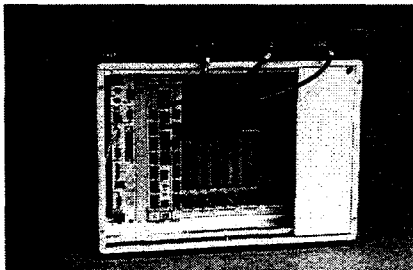
- Leadership Augmentation:
 - President and Chief Operating Officer
 - Vice President of Marketing
 - Vice President Regulatory Affairs
- Deployed Rural Field Trial in April - May for Demonstration in July - August 99
- TeleSentinel II (Multi-Carrier) Deployed June 1999
- AMPS/TDMA Market Trial - 4th Quarter 1999
- Development of CDMA Capabilities by year end 1999
- 1999 and Beyond - Integrate Technical Capabilities
- 2000 - Deliver Commercial Offerings
 - Domestic
 - Foreign

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EDM Platform

This shows the EDM platform. This is 19" rack-mountable with a 1U DF receiver (top) and a 6U VME chassis (actual chassis not shown) to support all the digital signal processing (DSP). The DSP is modular (3 boards) and scalable.

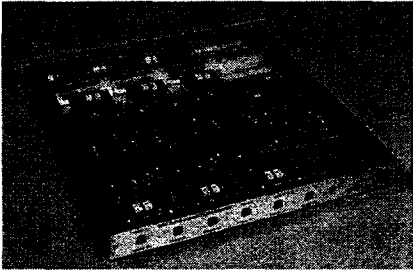


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EKSI®

DF Receiver Enclosure

This shows the direction finding (DF) receiver enclosure. This supports either three sectorized antennas (two elements each) or one omni-directional antenna (3 elements). The RF inputs (25MHz bandwidth) are down-converted and digitized.



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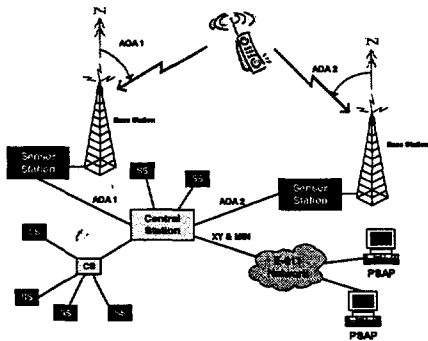
EKSI®

Location Determination Method(s)

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EKSI®

TeleSentinel™ Overview



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EKSI[®] Technical Considerations

- Implement a Flexible, Modular Architecture Exploiting AOA as the Core Technology
- Provide Support for:
 - Multiple Signal Formats (AMPS, TDMA, CDMA, GSM, ESMR, 3G)
 - Multiple Frequency Bands
- Exploit Additional LDTs Where Applicable to Complement AOA Approach, Such as:
 - Single Site Operations
 - Wider Bandwidth Signal Formats

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EKSI[®] Motivation for AOA

- Operates with Any Signal Format
- No Modifications to Existing System or Handset Technologies
- Requires only Two Receiver Sites
- Single Site Plus Collateral Information Also Possible, e.g. Time
- Minimal Network Synchronization
- Minimal Data Back-haul Cost

A flexible and cost effective solution

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EKSI[®]

Facts For the Record

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Facts

- Infrastructure based location systems locate all - old and new phones
- Handset enabled location systems only locate new enabled handsets
- Infrastructure based location does not require triangles of cellsites (1, 2 or 3 adequate)
- New cellsites need not be built for infrastructure based location systems
- Infrastructure based location systems perform at typical distances in rural environments (> 15mi.)
- Infrastructure based location systems typically locate at significantly better accuracies than the current FCC requirement

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Facts

- Location enabled handset proponents have not demonstrated suitable times to first fix (TTFF) - significant potential hang-up issue
- 37,000 transportation related fatalities occur each year - waivers will delay further reduction of this number annually
- There are 100,000 wireless 911 calls made daily - many are made by roamers
- Network based solutions can support multiple carriers from same platform/tower
- National Security will likely be adversely effected if a handset based location approach is deployed

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Common Needs

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Location Needs

- CC Docket 94-102
- Communications Assistance for Law Enforcement Act of 1994 (CALEA)
- Transportation Equity Act for the 21st Century (TEA-21)
 - System Management
 - Traveler Information
- Commercial Applications

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Conclusion

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Conclusion

FCC Should Be Judicious With Waivers

KSI'S TeleSentinel System:

- Enables Saving the Lives of the 70 Million People who have Phones Today (No Mods)
- AMPS/TDMA Infrastructure Based Location System Which Exceeds FCC Performance Requirement Now
- Facilitates Location of Multiple Carriers Customers from a Single Platform or Tower
- Can Locate Using Only Two Receive Sites
- Can Locate From a Single Site with Collateral Information
- Works in Rural Areas from One or Two Sites
- Will Work with All Air Interfaces
- Delivers Location for Multiple Requirements
- Works Well with Other Technologies
- Commercial Product Offering '99 - '00

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**Pioneer In
Wireless Location Technologies**

WIRELESS LOCATING TECHNOLOGY - KSI INC.

Intellectual Property Backgrounder

KSI Inc. has a significant portfolio of intellectual property that protects its angle-of-arrival (AOA) technology. The company currently holds the Direction Finding Localization System (DLFS) patent (U.S. Patent No. 4,728,959) and has three other patent applications pending in the U.S. and seven applications pending in foreign patent offices. The DFLS patent is protected until August 8, 2006.

The DLFS patent covers all AOA implementations in wireless communication systems for the purpose of locating wireless receivers and relates specifically to the determination of the bearing of a transmitted radio source using the measurement of the phase differences of the signal across the antenna array. The processing of this information to determine the actual AOA can take on various forms, but the patent does not restrict itself to any particular method.

KSI also has three patent applications pending which cover inventions in location-finding technology. One of these pending patents covers a system and method for locating standard wireless transmitters in situations when data are not available from multiple sites and/or where the setting (such as rural areas) or the economics favor or require less infrastructure-intensive solutions. This patent application has been filed in the U. S. and seven foreign patent offices, which could result in as many as 22 patents worldwide.

Another of KSI's pending patent applications covers a system for locating transmitters (RF emitters) by processing the combination of time-of-arrival data from at least two sites and is intended for use in situations when data are not available from more than two sites. Typically, time-difference-of-arrival (TDOA) systems require data from at least three sites.

The company's third pending patent application covers additional methods of signal-correlation processing to support the localization of communication transmitters. These methods make possible the accurate and efficient extraction of signal parameters, even in a frequency band that contains multiple received transmissions, such as occurs with Code Division Multiple Access (CDMA) communications. This invention significantly enhances robustness, applicability, and efficiency, and reduces the cost of implementation of correlation techniques for the detection and measurement of signal parameters to support the localization of communications signal transmitters.



**Pioneer In
Wireless Location Technologies**

KSI TO MARKET PATENTED TECHNOLOGY FOR WIRELESS LOCATING SYSTEMS

TeleSentinel™ The Value Added Solution

ANNANDALE, VA. - KSI Inc. has developed a proprietary system that will enable wireless carriers to provide Enhanced 911 and other value-added services. KSI's system, called TeleSentinel™, can determine the location of wireless telephone callers dialing 911, a requirement that has been recently mandated by the Federal Communications Commission.

TeleSentinel™ is a network-based wireless location system, which requires no modifications to existing phones or transmitters. TeleSentinel™ uses radio frequency emissions to determine the angle-of-arrival (AOA) of a received signal at two or more antenna sites. This data is then processed to obtain the location of the wireless telephone or other transmitting device.

"One of the main advantages of AOA is its ability to locate wireless telephones on either the control channel or voice channel and thus continuously update location changes," said Chuck Hinkle, president of KSI. "This capability provides us with a very robust system, one that is sensitive to location changes during a call."

The FCC has issued regulations requiring certain wireless carriers, including cellular, PCS, and specialized mobile radio (SMR), to have the ability by the year 2001 to locate 911 callers within a distance of 125 meters. TeleSentinel's capabilities already are well within the federal mandate.

"Although the demand for this technology is being fueled by the FCC mandate, we intend to leverage our expertise in this area into other consumer-oriented services for both private enterprises and public agencies," said Mark Hatten, CEO of KSI. "Our goal is for our patented location technology to become the standard in the wireless industry."

According to a recently published report by The Strategis Group, a wireless industry consulting firm based in Washington, D.C., the total expenditures for wireless locating equipment will exceed \$2 billion by 2002, and total annual revenue for the provision of associated services will exceed \$8 billion by 2005. These value-added location services include emergency response, navigation assistance, personal location, electronic Yellow Pages, and vehicle tracking.

KSI's angle-of-arrival technology is covered by its Direction Finding Localization System (DLFS) patent (U.S. Patent No. 4,728, 959). For AMPS and TDMA systems AOA has distinct

advantages over the time-difference-of-arrival (TDOA) method of wireless location, specifically in terms of location accuracy, the ability to track a moving telephone in real-time, system efficiency and utility, as well as projected costs.

Additionally, TeleSentinel™ is capable of providing location services without requiring any modification to the existing handsets of the more than 60 million wireless subscribers. Modifications to wireless phones, often extensive and costly, would be necessary with handset-based location solutions, such as the Global Positioning System (GPS).

KSI has deployed and successfully demonstrated a prototype TeleSentinel™ system, operating on live wireless telephone calls and providing location accuracy that is within the 125-meter E-911 requirement imposed by the FCC. The first generation of TeleSentinel™ was an analog (AMPS)-only system. KSI's second generation system is a dual-mode AMPS-TDMA system. KSI will incorporate location capability for the other digital signal formats in early 1999.

In addition to its DLFS patent for TeleSentinel™, which is protected until 2006, KSI Inc. has several pending patent applications, both in the U. S. and abroad, which cover additional inventions in location-finding technology. These pending patents will enable KSI to further enhance TeleSentinel's capabilities, allowing the system to locate wireless phones using any signal format with a very high degree of accuracy in all environments.

KSI Inc., based in Annandale, Va., is a technology company founded in 1986. KSI develops and deploys commercial wireless network-based, location-finding systems to serve the emerging public safety, personal security, fleet management, and intelligent transportation markets. The company has both patented and patent-pending technologies used in the development of systems to address these markets. For further information, visit the KSI web site at www.ksix.com.

TeleSentinel™



**Pioneer In
Wireless Location Technologies**

TELESENTINEL™ WIRELESS LOCATING SYSTEM

Technology Backgrounder

KSI Inc. has developed a patented technology for providing wireless location services in commercial markets which incorporates a network-based solution that requires no modifications to existing phones or transmitters. The system - called TeleSentinel™ - will enable cellular, PCS, and SMR carriers to provide the location of a wireless 911 caller as required by FCC Report and Order 96-264 (CC Docket No. 94-102).

TeleSentinel™ passively detects radio frequency (RF) emissions in the wireless phone frequency bands using phased-array antennas and receivers to determine the angle-of-arrival (AOA) of a received signal. The system processes the RF data to obtain the location of the calling phone, and then evaluates and displays the position coordinates on a computer-based map for monitoring and response at a Public Safety Answering Point (PSAP).

The data are also displayed in tabular form, including the Automatic Number Identification (ANI) and Automatic Location Information (ALI) that are to be provided to the PSAP in accordance with FCC requirements. This allows the public safety operator to focus on determining the nature of the problem and to provide positive confirmation to the caller that a response is underway.

The TeleSentinel™ system consists of two components: a network of local antenna signal processing subsystems and a central control subsystem. Signal measurements are extracted from wireless phone signals (control or voice) that are received and processed by sensor stations, which can be collocated with existing cellular field sites. The measurements are then transmitted to the control station where the data are processed automatically, with no need for operator interaction.

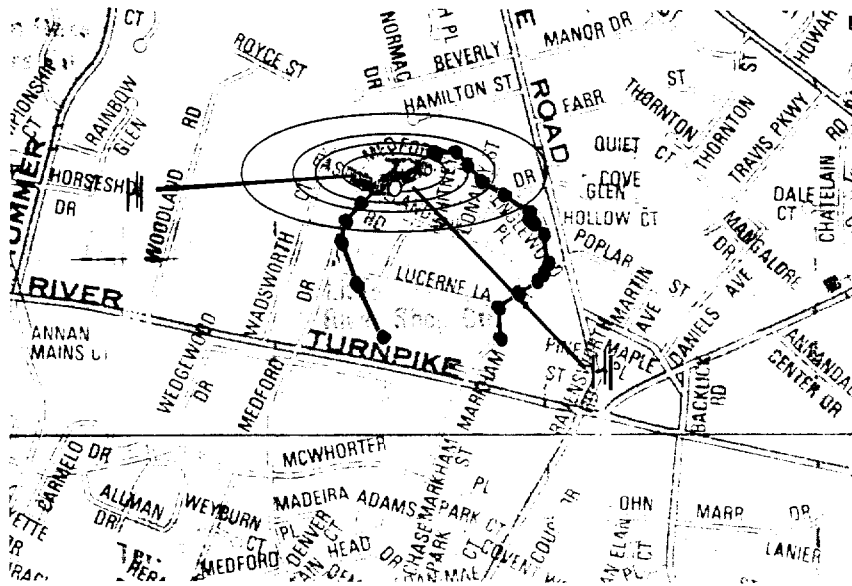
Using AOA, localization can be done on either the control channel or the voice channel, thereby enabling either the capture of a "snapshot" historical location or the continuous updating of dynamically changing locations in a positional track, respectively. The competing location technology is time-difference-of-arrival (TDOA). TDOA is acceptable when locating the control channel, but using TDOA for tracking on voice is a much more overhead intensive process than AOA. In addition, the small signal bandwidth, particularly for AMPS voice channels, results in poor time discrimination and, therefore, poor location accuracy for voice channel processing. With TDOA you need to receive the transmission concurrently at two sites to obtain a line of range difference and at three or more sites to obtain a fix. Using AOA you get a line of bearing from each site and two sites will generate a fix. There are serious operational shortfalls associated with TDOA, particularly for value added services, and once these are better understood, most carriers should opt to use AOA for locating and tracking.

EKSI® **Pioneer In** **Wireless Location Technologies**

FCC Phase II Wireless Phone Location Systems

KSI Inc., in Annandale, Virginia, is a **localization systems developer** for the wireless communications market providing a family of infrastructure-based location product and service solutions, including the patented **TeleSentinel™** wireless location system.

This system locates **unmodified** wireless phones using **angle of arrival (AOA)** and related technologies, for applications in E911, personal security, fleet and traffic monitoring, and other value-added services. In the environments and areas tested, KSI's systems normally meet or exceed the location accuracy requirements in the FCC's E911 (94-102) Docket. These systems can statically locate phones with control channel transmissions and can continuously monitor the moving positions of phones using voice channels. Currently evolving product designs will address all communications "air" interfaces.



KSI Inc.
7630 Little River Turnpike
Annandale, VA 22003
www.TeleSentinel.com

Charles Hinkle
Telephone: 703-941-5749
FAX: 703-941-5786
Email: CHinkle@ksix.com



PRESS RELEASE

For Immediate Release:
April 20, 1999

For additional information contact:
Elise Wright
Smart Moves
(703) 560-1020

KSI DEMOS LIVE TDMA WIRELESS LOCATION SYSTEM AT UWC GLOBAL SUMMIT

Miami, FL - April 20, 1999 - KSI Inc. today provided one of the first live demonstrations of a TDMA-based wireless location system. The demonstrations took place at the UWC Global Summit held in Miami, Florida.

KSI's system, called TeleSentinel™, uses an angle-of-arrival (AOA) location technology developed by the company and patented over a decade ago. Not only is the system highly accurate in locating a mobile wireless device, but it also uniquely provides for continuous location updates while a device is in motion.

TeleSentinel™ requires no changes to existing phone technologies and is completely transparent to the more than 60 million AMPS and TDMA subscribers.

"KSI is the undisputed technology leader in developing location capabilities for TDMA, the ANSI-136 digital standard," said Joan Wathen, vice president of marketing at KSI. "The KSI founders were early pioneers with not only AOA but all location technologies. KSI is committed to developing the best position determination solution for all evolving wireless standards."

Later this year KSI plans to introduce TeleSentinel II™. This second generation version will have a flexible modular design, will be backward compatible with both TDMA and AMPS, and will seamlessly integrate with third generation wireless systems.

KSI anticipates working closely with UWC technical forums to evolve TDMA/WIN capabilities to support location technology enhancements. The goal is to

- more -

KSI Inc.
April 20, 1999
Page Two

ensure that wireless localization and its applications are included in the evolution of the TDMA air interface standard and the supporting WIN network infrastructure.

"There is great synergy between location technology and TDMA/WIN capabilities that the UWCC wants to take full advantage of for our customers," said Leo Nikkari, vice president / Strategy & Programs for UWCC. "We applaud the initiative of UWCC companies like KSI in championing location technology evolution as common UWCC requirements, including ongoing developments in the specification of 136HS and WIN for next generation markets."

In today's demonstration, the KSI TeleSentinel[™] system exceeded the FCC's mandate that wireless carriers be able to locate wireless devices within 125 meters rms (67% of the time) in the year 2001. In fact, results from the TeleSentinel[™] field test indicated equivalent accuracy of better than 70 meters.

In addition to meeting the FCC's Phase II E911 mandate, KSI has shown that wireless carriers may begin to deploy TeleSentinel[™] in key locations well before 2001 for strategic and marketing purposes. Value-added services, which are derived from the ability to locate and track wireless phones and include emergency response, navigation assistance, personal location, electronic Yellow Pages and vehicle tracking, can be offered by carriers as soon as TeleSentinel[™] is in place. These applications are all supported in a WIN environment.

"The theme of this year's UWC Global Summit is "The Future is Now, the Reality is Today," said Wathen. "KSI has demonstrated the synergy between location- and TDMA-based technologies and the possibilities for exciting new enhanced services."

KSI Inc. is based in Annandale, Virginia, and Wallingford, Connecticut. Since it was founded in 1986, KSI has become an industry leader in developing and deploying commercial wireless network-based location-finding systems to serve the emerging public safety, personal security, fleet management and intelligent transportation markets. The company has both patented and patent pending technologies used in its TeleSentinel[™] system.

For further information about KSI and the TeleSentinel[™] system, visit the KSI web site at www.ksix.com.

- end -



PRESS RELEASE

For Immediate Release:
April 16, 1999

For additional information contact:
Elise Wright
Smart Moves
(703) 560-1020

WATHEN JOINS KSI AS NEW MARKETING VP

Annandale, VA - April 16, 1999 - KSI Inc. today announced that Joan Wathen has joined KSI as Vice President of Marketing. Prior to KSI, Ms. Wathen was Vice President, Wholesale Wireless Business Services, SNET Mobility, Inc. in New Haven, CT. Southern New England Telecommunications, Inc. is a telecommunications company specializing in communications, information and entertainment.

At SNET, Ms. Wathen directed the Wholesale Wireless Business Unit's sales, marketing and operation activities. She established SNET as the preeminent wireless wholesale provider in the region through the development of a comprehensive resale marketing program focused on profitable growth strategies.

Prior to leading the Wholesale Wireless Business Unit, Ms. Wathen held the position of Vice President, Strategic Planning and Business Development at SNET Mobility, Inc. Here she identified market opportunities, assessed competitive positioning, and formulated strategic options and partnerships for SNET's wireless business unit.

"Ms. Wathen has demonstrated excellent professional and executive capabilities, and brings outstanding marketing skills to our company," stated Mark Hatten, Chairman and CEO of KSI, Inc. "We look forward to an increased presence in the wireless localization industry as we move to the next level in our marketing efforts."

- more -

KSI, Inc.
Press Release
April 16, 1999
Page Two

Ms. Wathen has a Master of Business Administration, Marketing, from the University of Connecticut, and a Bachelor of Science, Mathematics and Computer Science, from Colorado State University.

KSI Inc. is based in Annandale, Virginia, and Wallingford, Connecticut. Since it was founded in 1986, KSI has become an industry leader in developing and deploying commercial wireless network-based location-finding systems to serve the emerging public safety, personal security, fleet management and intelligent transportation markets. The company has both patented and patent pending technologies used in its TeleSentinel[™] system.

For further information about KSI, visit the KSI web site at www.ksix.com.

- end -



PRESS RELEASE

For release:

January 12, 1999

For further information contact:

Jennifer Maxwell-Muir (For XYPOINT)
Maxwell Communications
(503) 232-4476

Elise Wright (For KSI)
Smart Moves Marketing & PR
(703) 560-1020

XYPOINT Certifies KSI as Phase II-Ready

SEATTLE, WA – January 12, 1999 – KSI, developer of TeleSentinel™ a network-based wireless location system, today became the first company to receive the XYPOINT Corp. interface certification for location determination technology (LDT). This certification recognizes the seamless interoperability of TeleSentinel™ with XYPOINT's intelligent network.

XYPOINT's certification program is designed to simplify wireless carriers' efforts to comply with Phase II of the Federal Communications Commission's Enhanced 9-1-1 (E9-1-1) mandate, which requires carriers to provide public safety officials with the precise location of wireless callers in distress.

The program ensures the successful interoperability of LDTs with XYPOINT's wireless E9-1-1 solution. XYPOINT's solution works with carriers to provide caller information to local Public Safety Answering Points (PSAPs), which handle 9-1-1 calls. Working in conjunction with XYPOINT's intelligent network, LDTs are needed to pinpoint the location of wireless callers.

"We have a clear path to roll out location-based services, as certification by XYPOINT demonstrates," said Chuck Hinkle, president of KSI. "Working hand-in-hand with XYPOINT has been a beneficial and rewarding process. Carriers, value-added service providers and customers will all benefit from the interface work we accomplished, because another obstacle to deployment has now been removed."

XYPOINT has worked with KSI to provide interface specifications, technical support, and managed testing to ensure interoperability. XYPOINT will support KSI and other certified LDT providers through joint marketing programs. Certified LDTs can use the XYPOINT certification logo in their marketing efforts. XYPOINT does not endorse individual LDTs; it simply certifies that the LDTs will work with XYPOINT's wireless E9-1-1 solution.

- more -

XYPOINT Certifies KSI as Phase II-Ready – Page 2

“Through the certification program, our aim is to aid our customers and other wireless carriers by assuring them that certified location-determining technology providers can be easily and inexpensively integrated into XYPOINT’s E9-1-1 solution and other location-enhanced services,” said Ken Arneson, president and CEO of XYPOINT.

Wireless carriers are required by a 1997 FCC order to provide enhanced information to PSAPs that request the service. XYPOINT’s wireless E9-1-1 service helps carriers meet the first phase of the order, which requires carriers to provide the 10-digit call back number and the location of the cell site originating a 9-1-1 call. Phase II of the order requires carriers to determine the location of the caller to within 125 meters, or approximately half a city block.

Wireless carriers are required by a 1997 FCC order to provide enhanced information to PSAPs that request the service. XYPOINT’s wireless E9-1-1 service helps carriers meet the first phase of the order, which requires carriers to provide the 10-digit call back number and the location of the cell site originating a 9-1-1 call. Phase II of the order requires carriers to determine the location the caller to within 125 meters, or approximately half a city block.

XYPOINT’s wireless E9-1-1 service provides carriers with a low cost, turnkey service. XYPOINT uses out-of-band, SS7 signaling to ensure fast delivery of the emergency call and the associated enhanced data. The company is working with several major local exchange carriers to deliver the emergency data through their existing location databases.

KSI’s network-based wireless location system, TeleSentinel™, is designed to work with all air interfaces – TDMA, CDMA, and AMPS. Using KSI’s technology, the angle-of-arrival (AOA) of received signals is calculated from radio frequency emissions. This information is then processed to obtain the location of wireless telephones and other transmitting devices. TeleSentinel™ locates wireless telephones upon call initiation and during call transmission, enabling wireless carriers to comply with the Phase II requirements of the FCC’s Enhanced 911 Docket as well as to meet the growing demand within the wireless industry for value-added location services. KSI, the pioneer of wireless location systems for AMPS, recently announced and demonstrated its dual-mode AMPS/TDMA next generation location capability at PCS ’98.

KSI Inc., a leading LDT company based in Wallingford, CT and Annandale, VA, has evolved from its genesis in 1986 to focus on developing and deploying commercial, wireless-network-based, location-finding systems to serve the emerging public safety (E9-1-1), personal security, fleet management and intelligent transportation markets. The company’s patented Angle-of-Arrival (AOA) technology and additional patent pending location determination technologies are used in the development of systems to address these markets. For further information, visit the KSI web site at www.ksix.com or contact Chuck Hinkle at (703) 941-5749.

- more -

XYPOINT Certifies KSI as Phase II-Ready – Page 3

XYPOINT, a privately held company based in Seattle, WA, is a leading designer, developer and marketer of wireless intelligent network services, providing location-related information services to the wireless industry. The company has contracts to provide Wireless E9-1-1 Service to 11 wireless carriers, including AirTouch, GTE Wireless, PrimeCo PCS and United States Cellular. The XYPOINT name, pronounced "zy-point," refers to locating a point using the X and Y coordinates on a map. XYPOINT's web site is www.xypoint.com.

- end -



PRESS RELEASE

For release:
August 31, 1998

For further information contact:
Elise Wright
Smart Moves
(703) 560-1020

Annandale, VA – August 31, 1998 - KSI Inc., an industry leader in the field of commercial wireless location technology, announces it has closed a fully-subscribed private offering of equity concluding its efforts to raise \$6.5 Million in capital. The offering was conducted with the assistance of Coastal Private Placements, Inc. as placement agent.

Proceeds of the offering will enable KSI to further implement its plans to develop and field test interfaces for the TeleSentinel™ system with digital cellular standards, including TDMA, CDMA, GSM and iDen.

KSI's primary technology, the TeleSentinel™ system, is a proprietary network-based system employing patented angle-of-arrival (AOA) location technology. TeleSentinel™ enables wireless carriers to comply with the Phase II requirements of the FCC's Enhanced 911 docket, as well as meet the growing demand within the wireless industry for value-added location services.

The investors participating in the offering include institutions such as Allen & Company, Inc., a New York investment bank, Cordoba Capital LLC, a venture capital group which focuses on the telecommunications industry, and Marubeni Corporation, a large Japanese trading company with significant operations in the telecommunications industry.

- more -

KSI Inc.
August 31, 1988
Page 2

“We have very aggressive goals for KSI and now have funding to pursue these goals,” said Mark Hatten, chairman and CEO of KSI. “Closing this offering marks KSI’s transition into the next stage of corporate development, allowing us to stay at the forefront of this evolving field of the wireless communications industry.”

KSI Inc. is based in Annandale, Virginia, and Wallingford, Connecticut. Since it was founded in 1986, KSI has become an industry leader in developing and deploying commercial wireless network-based location-finding systems to serve the emerging public safety, personal security, fleet management and intelligent transportation markets. The company has both patented and patent-pending technologies used in its TeleSentinel™ system.

For further information about KSI and the TeleSentinel™ system, visit the KSI web site at www.ksix.com.

- end -



PRESS RELEASE

For release:
August 19, 1998

For further information contact:
Elise Wright
Smart Moves
(703) 560-1020

KSI TO TEST NEXT GENERATION WIRELESS LOCATION SYSTEM

Annandale, VA – August 19, 1998 - KSI Inc. announces field testing of its second generation digital wireless telephone location system. The proprietary network-based system, known as TeleSentinel™, uses KSI's patented angle-of-arrival location technology. This second generation AMPS-TDMA version locates both analog (AMPS) and digital (TDMA) wireless telephones.

"This important breakthrough keeps KSI at the forefront of the development of location technology and provides AMPS- and TMDA-based carriers with the digital capability necessary to comply with the FCC's Phase II E-911 mandate," said Chuck Hinkle, president of KSI. "We have an aggressive schedule for incorporating CDMA and GSM capability into the system as well, and plan to conduct field tests early in 1999."

The first generation of TeleSentinel™, an AMPS-only version, demonstrated the system's ability to accurately locate standard AMPS cellular telephones. Both the AMPS-only version and the new dual-mode AMPS-TDMA version of TeleSentinel™ locate wireless telephones upon call initiation and during call transmission, enabling wireless carriers to comply with the Phase II requirements of the FCC's Enhanced 911 Docket as well as meet the growing demand within the wireless industry for value-added location services.

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"The founders of KSI were at the vanguard of the wireless location industry," stated Mark Hatten, KSI's Chief Executive Officer. "We are now assembling a larger team of professionals and taking other necessary steps to ensure that KSI remains an industry leader into the next century."

KSI holds the pioneer patent on angle-of-arrival location technology as it applies to the location of wireless devices. The company was the first to demonstrate technology capable of locating unmodified analog cellular phones. Later, when the FCC issued its E-911 Notice of Proposed Rulemaking, KSI was among the first to provide the Commission with actual data in support of the Rulemaking.

Testing of the second generation TeleSentinel™ system will take place at KSI's facility in Annandale, Virginia.

For further information about KSI and the TeleSentinel™ system, visit the KSI web site at www.ksix.com.

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